Case 2939

Galba Schrank, 1803 (Mollusca, Gastropoda): proposed designation of *Buccinum truncatulum* Müller, 1774 as the type species

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Abstract. The purpose of this application is to conserve the usage of the name *Galba* Schrank, 1803 (family LYMNAEIDAE) for a group of pulmonate fresh water snails by the designation of *Buccinum truncatulum* Müller, 1774 as the type species, in accord with universal usage. At present the nominal species *G. pusilla* Schrank, 1803 is the type by monotypy but the original material of this taxon has been lost and the species is not identifiable from its brief description. The name *Galba* is used either for a genus or for a subgenus of *Lymnaea* Lamarck, 1799. *Galba truncatula* is widespread and of economic importance. It is well known, particularly to parasitologists, as an intermediate host of *Fasciola hepatica* Linnaeus, 1758, the liver fluke of sheep and cattle.

Keywords. Nomenclature; taxonomy; Gastropoda; LYMNAEIDAE; *Galba*; *Galba truncatula*.

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1. Schrank (1803) established the new genus *Galba* (p. 262) and the single included species *Galba pusilla* (p. 285), which is therefore the type by monotypy. The descriptions of both the genus and the species were brief but the information of a dextrally-spiralled shell and triangular tentacles is sufficient to identify *G. pusilla* as belonging in the family LYMNAEIDAE. The taxon was represented by juvenile specimens (indicated by the very small shells, 'the size of millet grains', with three whorls). The shell was described as thin, transparent light brownish yellow or light brown when containing the snail body, or colourless when empty. It was covered by growth lines, and was high conical or turriculate in shape, with an oval aperture and blunt apex.

2. Subsequent authors have overlooked Schrank's (1803) nominal species *Galba pusilla*. Dall (1905, p. 60) noted: '*Galba* Schrank *Fauna Boica* III, pt. 2, pp. 262, 285, 1803. Sole ex. *L*[*ymnaea*] *truncatula* Müller', and malacologists and parasitologists this century have followed him in considering *Buccinum truncatulum* Müller, 1774 (p. 130), described from Thangelstedt, near Weimar, Germany, to be the type species of *Galba*. Schrank (1803, pp. 287–288), however, included *B. truncatulum* within the genus *Buccinum* Linnaeus, 1758.

3. The true identity of Schrank's (1803) species *Galba pusilla* cannot be ascertained. Schrank's collection of molluscs has been lost and no specialist has ever referred to its original contents. The description of *pusilla* could be applied to juvenile specimens of many European species of *Lymnaea* Lamarck, 1799 with high conical or turriculate shells, and would fit all species of the subgenera *Galba* and *Stagnicola*

Gray, 1840. In my view it most agrees with newborn *Lymnaea* (*Lymnaea*) *fragilis* Linnaeus, 1758 (see, for example, the illustration in Kruglov & Starobogatov, 1985, p. 28, fig. 2b).

4. The current situation threatens the stability of the generally accepted name *Galba* Schrank, 1803. In 1993 Kruglov & Starobogatov (p. 176) designated *Buccinum truncatulum* Müller, 1774 as the type species of *Truncatuliana* Servain, 1881 (p. 63), erroneously considering that this made it a junior objective synonym of *Galba*; in fact this action made *Truncatuliana* the valid name for the genus or subgenus with *B. truncatulum* as its type species. Servain (1881, pp. 43–64) established 20 groups within the genus *Lymnaea*, most without the fixation of type species. Some of the names he introduced have been used as valid for subgenera or sections of *Lymnaea* but the majority, including *Truncatuliana*, have not been used. *Truncatuliana* originally included five nominal species, among them *Buccinum truncatulum* Müller, 1774 (cited with 21 junior synonyms).

5. The names *Galba* and *G. truncatula* are much in use and have appeared in publications on mollusc and liver fluke taxonomy, biology, physiology, ecology and medicine, as well as general catalogues and guides. A representative sample covering these fields includes the recent works by Hubendick (1951, p. 122, fig. 306), Pantelouris (1965, pp. 17–23, 29, figs. 7–9), Odening (1971, pp. 39–46, figs. 17–20), Clarke (1981, p. 108, fig. 30), Soulsby (1982, pp. 40–43), Fitter & Manuel (1986, p. 1833, pl. 158, figs. 19.11–12), Pfleger & Chatfield (1988, p. 188), Fechter & Falkner (1990, p. 136) and Brown (1994, pp. 158, 340–341, fig. 76e). To conserve the usage of the name *Galba* Schrank, 1803 I propose that *Buccinum truncatulum* Müller, 1774 be designated the type species. Approval by the Commission will render the name *Truncatuliana* Servain, 1881 a junior objective synonym of *Galba*.

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Galba* Schrank, 1803 and to designate *Buccinum truncatulum truncatulum* Müller, 1774 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Galba* Schrank, 1803 (gender: feminine), type species by designation in (1) above *Buccinum truncatulum* Müller, 1774;

(3) to place on the Official List of Specific Names in Zoology the name *truncatulum* Müller, 1774, as published in the binomen *Buccinum truncatulum* (specific name of the type species of *Galba* Schrank, 1803);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Truncatuliana* Servain, 1881 (a junior objective synonym of *Galba* Schrank, 1803).

References

Brown, D.S. 1994. *Freshwater snails of Africa and their medical importance*, Ed. 2. x, 608 pp. Taylor & Francis, London.

Clarke, A.H. 1981. *The freshwater molluscs of Canada.* 446 pp. National Museum of Natural Sciences, National Museums of Canada, Ottawa.

Dall, W.Y. 1905. Land and freshwater Mollusca. *Harriman Alaska Series*, **13**: 1–171.

Fechter, R. & Falkner, G. 1990. *Weichtiere. Europäische Meeres- und Binnenmollusken*. 287 pp. Mosaik, Munich.

Fitter, R. & Manuel, R. 1986. *Field guide to the freshwater life of Britain and north-west Europe*. 382 pp., 332 pls., text-figs. Collins, London.

Hubendick, B. 1951. Recent Lymnaeidae. Their variation, morphology, taxonomy, nomenclature, and distribution. *Kungliga Svenska Vetenskapsakademiens Handlingar*, **3**(1): 1–223.

Kruglov, N.D. & Starobogatov, Ya.I. 1985. Method of experimental hybridization and some results of its application in the taxonomy of Lymnaeidae (Gastropoda: Pulmonata). *Malacological Review*, **18**: 21–35.

Kruglov, N.D. & Starobogatov, Ya.I. 1993. Annotated and illustrated catalogue of species of the family Lymnaeidae (Gastropoda Pulmonata Lymnaeiformes) of Palaearctic and adjacent river drainage areas. Part 2. *Ruthenica*, 3(2): 161–180.

Müller, O.F. 1774. *Vermium terrestrium et fluviatilium, seu animalium infusoriorum, helminthicorum et testaceorum, non marinorum, succincta historia*, vol. 2. 214 pp. Author, Hafnia & Lipsia.

Odening, K. 1971. *Der grosse Leberegel und seine Verwandten*. 127 pp., 4 pls., 54 text-figs. Ziemsen, Wittenberg Lutherstadt.

Pantelouris, E.M. 1965. *The common liver fluke*. International Series of Monographs on Pure and Applied Biology (Zoology), No. 21. viii, 259 pp. Pergamon Press, Oxford.

Pfleger, V. & Chatfield, J. 1988. *A guide to snails of Britain and Europe*. 216 pp. Hamlyn, London.

Schrank, F. von Pavla. 1803. *Fauna Boica. Durchgedachte Geschichte der in Baiern einheimischen und zahmen Thiere*, Band 3, Heft 2. 372 pp. Krull, Landshut.

Servain, G. 1881. *Histoire malacologique du lac Balaton en Hongrie*. 126 pp. Poissy.

Soulsby, E.J.L. 1982. *Helminths, arthropods and Protozoa of domesticated animals*, Ed. 7. xi, 809 pp. Baillière Tindall, London.